

NWS FORM E-5

U.S. DEPARTMENT OF COMMERCE
NOAA, NATIONAL WEATHER SERVICE

HSA OFFICE:
Grand Rapids, MI

REPORT FOR (MONTH & YEAR):
August 2004

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

TO: NATIONAL WEATHER SERVICE (W/OS31)
HYDROMETEOROLOGICAL INFO CENTER
1325 EAST-WEST HIGHWAY, RM 13468
SILVER SPRING, MD 20910

DATE:
September 10, 2004

SIGNATURE:
Daniel G. Houser, MIC
Mark L. Walton, Service Hydrologist

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41).



An **X** inside this box indicates that no flooding occurred within this Hydrologic Service Area.

No significant river flooding occurred in the Grand Rapids Hydrologic Service Area (HSA) during the month of August.

August Flooding

Urban and small stream flood advisories were issued for nuisance flooding during the month of August for the following counties: Jackson, Kalamazoo, Ottawa, and Muskegon.

August Precipitation

August precipitation totals were below normal at Grand Rapids, Lansing, and Muskegon, Michigan. Monthly precipitation totals at Grand Rapids, Lansing, and Muskegon, were 3.41, 3.19, and 3.06 inches, respectively. Precipitation for the month at these three sites were 0.37 of an inch below normal at Grand Rapids, 0.27 of an inch below normal at Lansing, and 0.71 of an inch below normal at Muskegon, Michigan. For the year, precipitation totals at Grand Rapids, Lansing, and Muskegon were above normal, with Grand Rapids 4.26 inches above normal, Lansing 5.07 inches above normal, and Muskegon 6.43 inches above normal for the year.

August Temperatures

August 2004 was cool across southwest lower Michigan, with temperatures over 3 degrees below normal. Temperatures for the month of August were below normal at Grand Rapids, Lansing, and Muskegon, averaging 3.3, 3.3, and 3.5 degrees below normal, respectively.

August River Levels

River levels were near to above normal during the month of August. All rivers stayed below flood stage during the month of August. The end of the month percentage of normal flow for selected rivers is listed below:

<u>Location</u>	<u>River</u>	<u>% of Normal</u>
Scottville	Pere Marquette	93
Whitehall	White	133
Ewart	Muskegon	86
Mt. Pleasant	Chippewa	123
Lansing	Grand	198
Grand Rapids	Grand	168
East Lansing	Red Cedar	224
Hastings	Thornapple	338
Battle Creek	Battle Creek	301
Comstock	Kalamazoo	182

Hydrologic Products issued this month:

- 1 Hydrologic Outlook (ARBESFGRR) was issued
- 8 Flood Statements (ARBFLSGRR) were issued
- 1 Hydrologic Statements (ARBRVSGRR) was issued
- 31 Hydrologic Summary's (ARBRVAGRR) were issued
- 31 Daily River and Lake Summary's (ARBRVDGRR) were issued